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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.            | CONFIRMATION NO. |
|--|-------------|----------------------|--------------------------------|------------------|
| 10/018,169   | 07/02/2002  | Taka-Aki Sato        | 59131-A<br>PCT-US/JPW/FHB      | 8510             |
| 7590<br>Cooper & Dunham<br>1185 Avenue of the Americas<br>New York, NY 10036 |             | 01/04/2007           | EXAMINER<br>LANDSMAN, ROBERT S |                  |
|  |             |                      | ART UNIT                       | PAPER NUMBER     |
|  |             |                      | 1647                           |                  |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 31 DAYS                                | 01/04/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/018,169

Applicant(s)

SATO, TAKA-AKI

Examiner

Robert Landsman

Art Unit

1647

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) See Continuation Sheet are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

Continuation of Disposition of Claims: Claims pending in the application are 83  
1,5,6,9,11,13,15,16,18,20,23,26,29,30,39,41,43,44,46,48-50,53,55,69,73,78-80,83-87,90,91,100,102,105 and 131-137.

PK  
12.27.06

Continuation of Disposition of Claims: Claims subject to restriction and/or election requirement are  
1,5,6,9,11,13,15,16,18,20,23,26,29,30,39,41,43,44,46,48-50,53,55,69,73,78-80,83-87,90,91,100,102,105 and 131-137.  
83

## DETAILED ACTION

### *1. Formal Matters*

A. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group 1, claim(s) 1,5,6,9,11,13,15,16,18,20,23, 29, 30, 43,49, 50, 53, drawn to a nucleic acid encoding 75, the encoded polypeptide and methods of making and using the polypeptide.

Group 2, claim(s) 26, drawn to antisense.

Group 3, claim(s) 39,41, drawn to an antibody.

Group 4, claim 44, drawn to a method of gene therapy.

Group 5, claim 46, drawn to a transgenic animal expressing p75.

Group 6, claim 48, drawn to a screening method using p75 transgenic animals.

Group 7, claim 55, drawn to a method of identifying an inhibitor of p75 binding.

Group 8, claim 69, drawn to a method of identifying an apoptosis-inducing compound.

Group 9, claim 73, drawn to a method of screening a cDNA library.

Group 10 claim 78, drawn to a method of inducing caspase activity using p75.

Group 11, claim 79, drawn to a method of inhibiting NF-kB activity.

Group 12, claim 80, drawn to a method of detecting a neurodegenerative disease using p75.

Group 13, claim 83, drawn to a transgenic animal expressing HGR74.

Group 14, claim 85, drawn to a screening method using HGR74 transgenic animals.

Group 15, claim 86, 90, drawn to a method of producing HGR74.

Group 16, claim 87, drawn to a method of inducing apoptosis using HGR74.

Group 17, claim 91, drawn to a method of identifying an apoptosis-inducing compound.

Group 18 claim 100, drawn to a method of inducing caspase activity using p75 and HGR74.

Group 19, claim 102, drawn to a method of detecting a neurodegenerative disease using p75 and HGR74.

Group 20, claim 105, drawn to a method of identifying an apoptosis-inhibiting compound.

Group 21, claim 131, drawn to a nucleic acid encoding a mutant p75, NADE 41-124.

Group 22, claim 132, drawn to a nucleic acid encoding a mutant p75, NADE 1-71.

Group 23, claim 133, drawn to a nucleic acid encoding a mutant p75, NADE 41-71.

Art Unit: 1647

Group 24, claim 134, drawn to a nucleic acid encoding a mutant p75, NADE 1-120.

Group 25, claim 135, drawn to a nucleic acid encoding a mutant p75, NADE 1-112.

Group 26, claim 136, drawn to a nucleic acid encoding a mutant p75, NADE 1-100

Group 27, claim 137 drawn to a nucleic acid encoding a mutant p75, NADE L99A.


The invention listed as Groups 1-27 do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical feature for the following reasons: the special technical feature of Group I is a polynucleotide encoding p75. The special technical feature of each group is not the same, or does not correspond to the special technical feature of any other Group. The products of Groups 1-3 are 20-27 are structurally and functionally distinct, and the methods of Group 4-19 require different method steps and reagents for achieving different goals. The Groups are not linked by a special technical feature within the meaning of PCT Rule 13.2 so as to form a single inventive concept.

***Advisory information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Landsman whose telephone number is (571) 272-0888. The examiner can normally be reached on M-Th 10 AM – 7 PM (eastern).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Robert Landsman  
Primary Examiner  
Art Unit 1647